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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,490	07/25/2003	Manoharprasad K. Rao	FGT 1827 PA	1489
27256	7590	05/23/2006	EXAMINER	
ARTZ & ARTZ, P.C. 28333 TELEGRAPH RD. SUITE 250 SOUTHFIELD, MI 48034			LIEU, JULIE BICHNGOC	
			ART UNIT	PAPER NUMBER
			2612	

DATE MAILED: 05/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/604,490

Applicant(s)

RAO ET AL.

Examiner

Julie Lieu

Art Unit

2612

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office action is in response to Applicant's amendment filed March 08, 2006.

Claims 14 and 20 have been amended.

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

#### ***Claim Rejections - 35 USC § 112***

3. Claims 1-13 are again rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification fails to disclose that the sensing system aid modules and each of the at least one receiver have a plurality of associated active operating modes.

#### ***Claim Rejections - 35 USC § 102***

4. Claims 14-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Scholfield (US Appl. 2004/0145457)

Claim 14:

Scholfield discloses a method of performing a plurality sensing system aids for a vehicle comprising:

- a. generating an object detection signal via a plurality of vision sensing systems comprising a forward vision sensor (para. [0382])
- b. operating a sensing system aid modules comprising a parking-aid module corresponding with each of said plurality of vision sensing systems via a single controller; and
- c. generating at least one safety system signal in response to the object detection signal.

Scholfield fails to clearly states that a plurality of sensing system aid modules are used. However, it would have been obvious to one skilled in the art to use more than one sensing system aid module in the system of Schofield because it would be desirable to operate the plurality of vision sensing systems simultaneously.

Claim 15:

The method in Schofield further comprises:

- a. generating a transmission gear signal (para. [0360]); and
- b. operating the sensing system aid module in response to the transmission gear signal
- c. generating at least one safety system signal (display) in response to the object detection signal.

Claim 16:

The method in Schofield further comprises continuously operating a side collision vision sensing system in a pre-collision sensing mode (para. [0373]).

Claim 17:

The method in Schofield also comprises operating at least one front collision sensing system in at least the parking-aid mode.

Claim 18:

Schofield also disclose a method comprising operating at least one rearward collision warning system in at least one mode selected from a parking-aid mode, a reversing-aid mode, and a pre-collision sensing mode (para. [0264]).

Claim 19:

Schofield fails to disclose the step of determining whether the vehicle is traveling below a predetermined velocity and operating the sensing system aid modules in response to the determination. Nonetheless, it would have been obvious to one skilled in the art to add this feature in the Schofield system because it would allow the system to control the movement of the vehicle more safely.

Claim 20:

Schofield discloses a vision-based object detection system for a vehicle comprising:

- a. a transmission gear sensor generating a transmission gear signal (para. [0360])
- b. a plurality of vision sensing systems having at least one vision receiver, generating an object detection signal, and operating simultaneously in a plurality of modes selected from a reversing-aid mode, a parking-aid mode corresponding to both frontal and rearward detection, lane departure aid mode, and lane-keeping aid mode; and

Art Unit: 2612

c. a single vision processor comprising a sensing system aid modules corresponding with each of said plurality of vision sensing systems, operating the sensing system aid modules in response to the transmission gear signal, and generating at least one warning signal or one countermeasure signal in response to the object detection signal.

Scholfield fails to clearly states that a plurality of sensing system aid modules are used. However, it would have been obvious to one skilled in the art to use more than one sensing system aid module in the system of Schofield because it would be desirable to operate the plurality of vision sensing systems simultaneously.

#### *Allowable Subject Matter*

5. Claims 1-13 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

#### *Applicant's Arguments*

6. The Applicant has presented the following arguments:

##### Argument 1:

The Applicants have traversed the 112 rejection and pointed out location in the specification where the Applicant believes has support for the claimed subject matter.

Argument 2:

The Applicants have asserted that the use of a parking-aid camera and a reversing camera in Scholfield does not infer the use of a parking aid module that is associated with multiple sensing systems.

Argument 3:

The Applicant has stated that Scholfield fails to disclose operating a vision sensing system in a parking mode, lane departure mode or lane keeping mode and further stated that the disclosure of a parking-aid camera that is solely utilized when the host vehicle is traveling in a forward direction and at a slow speed, does not suggest forward and rearward object detection while operating in a parking aid mode.

***Response to Applicant's Arguments***

Response to Argument 1:

It should be noted that those paragraphs and figures referred by the Applicant only indicate that the system has a plurality of (different) sensing system aid modules operating in different modes. They do not indicate that the plurality of sensing system aid modules (each) and each of the at least one receiver have a plurality of associated active operating modes. That

Art Unit: 2612

is to say, for example, each sensing system aid module and receiver operate in only one operating modes (as disclosed) not different operating modes (as claimed.)

Argument 2:

In para. [0382] it is stated that the parking aid camera utilized other techniques as in reverse aid camera; thus, it infers that the parking aid camera has a module to control its operation as the reverse aid camera module and camera.

Argument 3:

The Applicant should note that the reference does disclose parking aid mode and the slow speed associated with the parking mode as shown in para. [0382]. Also, para. [0390] suggest object detection used in guiding vehicle motion.

***Conclusion***

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.



Art Unit: 2612

8: Any inquiry concerning this communication or earlier communications from the examiner should be directed to Julie Lieu whose telephone number is 571-272-2978. The examiner can normally be reached on MaxiFlex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Horabik can be reached on 571-272-3068. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Julie Lieu', with a long, sweeping horizontal stroke extending to the right.

Julie Lieu  
Primary Examiner  
Art Unit 2612

May 15, 06